

 <p>SPAWAR <b>InTec</b> <b>Training</b> <small>Leading the DoD in Information Technology</small></p>	<p><b>Course Description</b></p> <p><b>CompTIA A+</b></p>	<p><b>SPAWARSYSCEN-SD PACIFIC C4ISR DEPARTMENT</b>  2293 Victor Wharf Access Rd  Attn: 2544 / InTec Training  Pearl City, HI 96782-3356  Phone: (808) 474-0714 DSN  Fax: (808) 474-4478  Email: <a href="mailto:training@intecph.navy.mil">training@intecph.navy.mil</a>  Web: <a href="http://www.intecph.navy.mil/">http://www.intecph.navy.mil/</a></p>
---	---	--

*Course CT-100 – 10 days -Instructor-led*

## CompTIA A+ Certification

### Introduction

If you are getting ready for a career as an entry-level information technology (IT) professional or personal computer (PC) service technician, the CompTIA® A+® Certification course is the first step in your preparation. The course will build on your existing user-level knowledge and experience with personal computer software and hardware to present fundamental skills and concepts that you will use on the job. In this course, you will acquire the essential skills and information you will need to install, upgrade, repair, configure, troubleshoot, optimize, and perform preventative maintenance of basic personal computer hardware and operating systems.

### At Course Completion

Upon successful completion of this course, students will be able to:

- identify the components of standard desktop personal computers.
- identify fundamental components and functions of personal computer operating systems.
- identify best practices followed by professional personal computer technicians.
- install and configure computer components.
- install and configure system components.
- maintain and troubleshoot peripheral components.
- troubleshoot system components.
- install and configure operating systems.
- maintain and troubleshoot installations of Microsoft Windows.
- identify network technologies.
- install and manage network connections.
- support laptops and portable computing devices.
- support printers and scanners.
- identify personal computer security concepts.
- support personal computer security.

## Prerequisites

- Students taking this course should have the following skills: End-user skills with Windows-based personal computers, including the ability to: Browse and search for information on the Internet. Start up and shut down the computer. Log on to a computer and computer network. Run programs. Move, copy, delete, and rename files in Windows Explorer. Basic knowledge of computing concepts, including: The difference between hardware and software. The functions of software components, such as the operating system, applications, and file systems. The function of a computer network.

## Certification Exams

- This course will help prepare students to achieve a CompTIA A+ Certification.

## Course Materials and Software

- CompTIA® A+® Certification: A Comprehensive Approach for all 2006 Exam Objectives. ElementK Courseware, 2006

## Course Outline

### **Lesson 1: Personal Computer Components**

- Topic 1A: Personal Computer Components
- Topic 1B: System Unit Components
- Topic 1C: Storage Devices
- Topic 1D: Personal Computer Connection Methods

### **Lesson 2: Operating System Fundamentals**

- Topic 2A: Personal Computer Operating Systems
- Topic 2B: Windows User Interface Components
- Topic 2C: Windows File System Management
- Topic 2D: Windows System Management Tools

### **Lesson 3: PC Technician Professional Best Practices**

- Topic 3A: Tools of the Trade
- Topic 3B: Electrical Safety
- Topic 3C: Environmental Safety and Materials Handling
- Topic 3D: Perform Preventative Maintenance
- Topic 3E: Diagnostics and Troubleshooting
- Topic 3F: Professionalism and Communication

### **Lesson 4: Installing and Configuring Peripheral Components**

- Topic 4A: Install and Configure Display Devices

Topic 4B: Install and Configure Input Devices  
Topic 4C: Install and Configure Adapter Cards  
Topic 4D: Install and Configure Multimedia Devices

### **Lesson 5: Installing and Configuring System Components**

Topic 5A: Install and Configure Storage Devices  
Topic 5B: Install and Configure Power Supplies  
Topic 5C: Install and Configure Memory  
Topic 5D: Install and Configure CPUs  
Topic 5E: Install and Configure System Boards

### **Lesson 6: Maintaining and Troubleshooting Peripheral Components**

Topic 6A: Troubleshoot Display Devices  
Topic 6B: Maintain and Troubleshoot Input Devices  
Topic 6C: Troubleshoot Adapter Cards  
Topic 6D: Troubleshoot Multimedia Devices

### **Lesson 7: Troubleshooting System Components**

Topic 7A: Troubleshoot Storage Devices  
Topic 7B: Troubleshoot Power Supplies  
Topic 7C: Troubleshoot Memory  
Topic 7D: Troubleshoot CPUs  
Topic 7E: Troubleshoot System Boards

### **Lesson 8: Installing and Configuring Operating Systems**

Topic 8A: Install Microsoft Windows  
Topic 8B: Upgrade Windows  
Topic 8C: Add Devices to Windows  
Topic 8D: Optimize Windows

### **Lesson 9: Maintaining and Troubleshooting Microsoft Windows**

Topic 9A: Operating System Utilities  
Topic 9B: Maintain Microsoft Windows  
Topic 9C: Troubleshoot Microsoft Windows  
Topic 9D: Recover Microsoft Windows

### **Lesson 10: Network Technologies**

Topic 10A: Network Concepts  
Topic 10B: Network Communications  
Topic 10C: Network Connectivity  
Topic 10D: Internet Technologies

### **Lesson 11: Installing and Managing Network Connections**

Topic 11A: Create Network Connections  
Topic 11B: Install and Configure Web Browsers  
Topic 11C: Maintain and Troubleshoot Network Connections

### **Lesson 12: Supporting Laptops and Portable Computing Devices**

Topic 12A: Laptop and Portable Computing Device Components  
Topic 12B: Install and Configure Laptops and Portable Computing Devices  
Topic 12C: Maintain and Troubleshoot Laptops and Portable Computing Devices

**Lesson 13: Supporting Printers and Scanners**

Topic 13A: Printer and Scanner Technologies  
Topic 13B: Printer and Scanner Components  
Topic 13C: Printer and Scanner Processes  
Topic 13D: Install and Configure Printers and Scanners  
Topic 13E: Maintain and Troubleshoot Printers and Scanners

**Lesson 14: Personal Computer Security Concepts**

Topic 14A: Security Fundamentals  
Topic 14B: Security Protection Measures  
Topic 14C: Data and Physical Security  
Topic 14D: Wireless Security  
Topic 14E: Social Engineering

**Lesson 15: Supporting Personal Computer Security**

Topic 15A: Install and Configure Security Measures  
Topic 15B: Maintain and Troubleshoot Security Measures

**Appendix A: Mapping Course Content to the CompTIA A+ Essentials 220-601 Exam Objectives**

**Appendix B: Mapping Course Content to the CompTIA A+ IT Technician 220-602 Exam Objectives**

**Appendix C: Mapping Course Content to the CompTIA A+ Remote Technician 220-603 Exam Objectives**

**Appendix D: Mapping Course Content to the CompTIA A+ Depot Technician 220-604 Exam Objectives**

**Appendix E: A Brief History of Personal Computers**

**Appendix F: CompTIA A+ Acronyms**